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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,091	03/02/2004	Eun-sook Kang	46187	1204

1609 7590 10/26/2007
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WASHINGTON,, DC 20036

EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2628

MAIL DATE	DELIVERY MODE
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10/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/790,091	KANG, EUN-SOOK	
	Examiner	Art Unit	
	Javid A. Amini	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/30/2007 has been entered.

Response to Arguments

Applicant's arguments filed on 8/30/2007 with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-6, 10, 12, 14-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa et al. US 6,507,411 B1, hereinafter Nishikawa, and in view of Edelson 5,774,110.

1. Re. claim 1.

Nishikawa in figs. 10 and 11 illustrates a method of enlarging an image and (see Nishikawa in fig. 17 steps 17.4-17.6) printing an enlarged image, the method comprising:

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(Nishikawa in fig. 2 using the image data generated by the application 201) identifying an image file having an image to be enlarged and printed. Nishikawa at col. 15 lines 15-30 discloses determining the number of pixels of the image using the identified image file. Nishikawa at col. 15 lines 22-27 clearly discloses, "if the graphic engine is a 16-bit graphic engine and a 600-dpi (examiner's note: dpi stands for dot per inch, and dot means pixel) A4 landscape-size image is to be enlarged ten times, the number of pixels in the horizontal direction will be $10 \times 600 \text{ (dot/inch)} \times 296 \text{ (mm)/} 25.4 \text{ (mm/inch)} = 69,921 \text{ dots}$. Nishikawa in fig. 18 steps 18.1-18.3 illustrates enlarging the image at the determined enlargement ratio and printing the enlarged image.

Nishikawa does not teach explicitly (see bolded and underlined area) determining an enlargement ratio corresponding to **the determined number of pixels to print without degrading image quality**.

However, Edelson teaches determining an enlargement ratio corresponding to the determined number of pixels to print without degrading image quality (e.g., in col. 4 lines 6-8 teaches the filter RAMDAC can control the quality of images expanded). Edelson in col. 18 lines 16-37 teaches that a printer can be suitable as a display device.

Thus, it would have been obvious to a person skill in the art to incorporate the digital images of Edelson into Nishikawa in order to obtain the enlarged image without degrading image quality by implementing a tracking filter, the contents of the interspersed pixels become inconsequential and can contain any value, even replication values. Because replicated pixels do not interfere with the filter function, the filter can follow and operate on the output of standard hardware or software zoom functions which replicate pixels.

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Claims 6, 12 and 15 are rejected with similar reason as set forth in claim 1, above.

2. Re. claims 5, 10, 14, and 19. Nishikawa in fig. 17 step 17.3 clearly illustrates the feature of the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4,7-9, 11, 13, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa, Edelson and further in view of Ishizaka et al. US 2005/0052662

A1.

3. Re. claims 2, 3 and 7-8.

Nishikawa and Edelson are silenced as to the image file identifying step further comprises selecting the image file. Ishizaka at paragraph 0006 discloses displaying or printing of such digital images with high quality has been demanded with distribution of digital cameras. It's obvious the digital camera has numerous image files. Re. claims 3 and 8, the digital camera can be considered as an outside source. Ishizaka at [0026] discloses that according to the invention, there is provided an image processing apparatus for performing enlargement processing of an original image represented by a large number of pixels to provide an enlarged image

Thus, it would have been obvious to a person skill in the art to incorporate the digital images of Ishizaka into Nishikawa and Edelson in order to obtain a selection of image files,

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because Ishizaka's processing method, and an image processing program for performing the enlargement processing using a computer, with Nishikawa's printing control for printing an image upon enlarging the same. It's very beneficial to selective user to locate the image file quickly.

4. Claims 16-17 are rejected with similar reason as set forth in claims 2-3, and 7-8.

5. Re. claims 4, 9 and 13.

Nishikawa and Edelson are silenced as to the number of pixels is extracted from header information stored in the identified image file. Ishizaka at paragraph 0006 discloses when the objective image is again formed from the set of the range block positions; coordinate conversion, and pixel value conversion, the operation of assigning the result of performing coordinate conversion and pixel value conversion to range block for any initial image to domain block is iterated. Ishizaka at paragraph 0117 teaches the enlarged image corresponding to the original image is stored in the enlarged image data storage section 58 and the enlarged image is updated. The enlarged image data obviously contains the number of pixels.

Thus, it would have been obvious to a person skill in the art to incorporate the enlarged image data storage section 58 of Ishizaka into Nishikawa and Edelson in order to extract the number of pixels from header information stored in the identified image file, since Ishizaka's processing method, for storing the enlarged image data in storage section using a computer, and Nishikawa's printing control for printing an image upon enlarging the same. The user may quicker select the proper information on display.

6. Re. claim 11. Nishikawa and Edelson are silenced about the features in claim 11, however, Ishizaka illustrates in table 1, under paragraph 0123. Thus, it would have been obvious

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to a person skill in the art to incorporate the enlarged image data storage section 58 of Ishizaka into Nishikawa and Edelson in order to extract the number of pixels from header information stored in the identified image file, since Ishizaka's processing method, for storing the enlarged image data in storage section using a computer, and Nishikawa's printing control for printing an image upon enlarging the same. The user may quicker select the proper information on display.

7. Claim 18 is rejected with similar reason as set forth in claim 4, above.

Conclusion

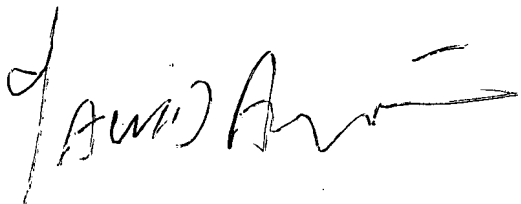
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Javid A Amini
Examiner
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J.A.

A handwritten signature in black ink, appearing to read 'Javid Amini', with a long horizontal stroke extending to the right.